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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/560,285

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Subhra S. Bose

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EXAMINER

HUARACHA, WILLY W

ART UNIT

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2195

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09/14/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,285	Applicant(s) BOSE ET AL.	
	Examiner WILLY W. HUARACHA	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/12/2005, 03/05/2010, 04/28/2010 and 07/20/2010.

DETAILED ACTION

1. Claims 1-25 are currently pending and have been examined.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. As per claim 1, the claim is directed to an automated work flow system. However, the recited components of the system (e.g. a process description including flows rules and states) appear to lack the necessary physical components (hardware) to constitute a machine or manufacture under 101. Therefore, these claim limitations can be reasonably interpreted as program modules or software per se. and hence non-statutory. Applicant is advised to amend claims to include hardware (e.g. processor, memory). Claims 2-10 are rejected for failing to cure the deficiencies of their respective parent claim.

5. As per claim 11, the claim is directed to an automated work flow system. However, the recited components of the system (e.g. a process description including flows rules and states) appear to lack the necessary physical components (hardware) to constitute a machine or manufacture under 101. Therefore, these claim limitations can be reasonably interpreted as program modules or software per se. and hence non-statutory. Applicant is advised to amend claims to include hardware (e.g. processor, memory). Claims 12-20 are rejected for failing to

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cure the deficiencies of their respective parent claim.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following claim languages lacks antecedent basis:

- i. Claim 1 -- “the control flow”, “the legal state” and “the business rules” –
- ii. Claim 2, -- “the desired precondition and post condition” --
- iii. Claims 4, -- “the parties”, “the other participants” and “the interactions” --
- iv. Claim 7, -- “the preconditions and postconditions”--
- v. Claims 11, 21-25, have similar deficiencies as claim 1.
- vi. Claims 14 and 17 have similar deficiencies as claims 4 and 7 respectively.

a. The following claim languages are not clearly understood and indefinite:

- i. As per claim 1, it is unclear whether the terms “Flows”, “States” and “Rules” in lines 4-5 are the same as the “flows, rules and states” in line 3 (e.g. if the same, 'said' or 'the' should be used). Lines 1-2, it is not clearly understood whether “the legal state transitions” are for a business entity or for a plurality of

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business entities".

ii. As per claim 4, it is uncertain whether the term "parties" is the same as the term "participants".

iii. As per claims 11, 22, 24 and 25, the claims are rejected for having similar deficiencies as claim 1.

iv. As per claim 14, the claim is rejected for having similar deficiencies as claim 4.

v. As per claim 21, the claim is rejected for having similar deficiencies as claim 1. Further, claim 21 recites "means for storing a process description that includes a medium for storing". The claim is improper because it contains both a "means plus function" limitation and "description of the structure". Appropriate correction is required.

vi. As per claim 23, the claim is rejected for having similar deficiencies as claims 1 and 21.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kreger "Web Services Conceptual Architecture" in view of Cole et al. (US Pub. No. 20030090514 A1).

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4. Kreger was disclosed in an IDS filed on 04/28/2010.

5. As per claim 1, Kreger teaches the invention substantially as claimed including an automated workflow system for executing business logic using declarative languages comprising (Abstract; page 6, lines 5-11; and page 33):

a process description further including flows (page 11, lines 14-23; fig. 2); wherein Flows represent the control flow between business functions (page 12, lines 25-33).

Kreger does not expressly teach a process description including rules and states; wherein States represent the legal state transitions for a business entities, and Rules represent the business rules and policies enforced on the business entities in an externalized form. However, Cole teaches a technique for controlling business processes using rules, states and flows (par. 0015, lines 1-24)); wherein States represent the legal state transitions for a business entities (par. 0112, 0115), and Rules represent the business rules and policies enforced on the business entities in an externalized form (par. 0073-0074).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied to the system of Kreger the technique for controlling business processes using rules, states and flows teaching as outlined by Cole in order to efficiently control execution of business processes and provide the capability to adapt.

6. As per claim 2, Cole teaches a library of tasks, in which each task has a precondition and postcondition wherein the desired precondition and postcondition are automatically designed prior to execution (par. 0089 - 0092).

7. As per claim 3, Cole teaches a coordinator that coordinates the flows, rules and states (par. 0066, system context layer).

8. As per claim 4, Kreger and Cole do not expressly teach a plurality of parties, in which one of the parties acts as a trusted third party for the other participants, and performs services comprising Guaranteeing the correctness of a protocol, both at design time and at run time Maintaining records of all the interactions and Performing some activities for the other participants as a part of the workflow. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to have expanded the teachings of Kreger and Cole by providing a mechanism that allows a participant of a plurality of participants to perform verification at design or runtime so as to ensure correctness of a business process for other participants.

9. As per claim 5, Kreger teaches in which the declarative language is XML (page 6 Web Services, par. 1).

10. As per claim 6, Kreger teaches in which the declarative language is WSDL (page 6 Web Services, par. 1).

11. As per claim 7, Cole teaches in which the workflow further comprises assertions, which describe the preconditions and postconditions of the system at that point in the workflow (par.

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0089-0102).

12. As per claim 8, Cole teaches wherein the assertions are checked at runtime as the system executes to ensure that the execution is correct (par. 0092).

13. As per claim 9, Cole teaches wherein the precondition assertions are used to prove the correctness of the design before the design; that the assertion specified (par. 0090-0092).

14. As per claim 10, Cole teaches wherein the postcondition assertions are used to prove the correctness of the design at the end of the workflow (par. 0090-0092).

15. As per claim 11, it is a workflow system using web-based transport protocol having similar limitations as claim 1. Therefore, claim 11 is rejected for the same rationale as applied to claim 1.

16. As per claim 12, is rejected for the same rationale as applied to claim 2.

17. As per claim 13, is rejected for the same rationale as applied to claim 3.

18. As per claim 14, is rejected for the same rationale as applied to claim 4.

19. As per claim 15, Kreger teaches the Web-based transport protocol is http (page 10; and

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fig. 2).

20. As per claim 16, Kreger teaches the Web-based transport protocol is https (page 10; and fig. 2).

21. As per claim 17, is rejected for the same rationale as applied to claim 7.

22. As per claim 18, is rejected for the same rationale as applied to claim 8.

23. As per claim 19, is rejected for the same rationale as applied to claim 9.

24. As per claim 20, is rejected for the same rationale as applied to claim 10.

25. As per claim 21, Kreger teaches the invention substantially as claimed including a system for executing business logic using declarative languages comprising (Abstract; page 6, lines 5-11; and page 33):

a process description that includes a medium for storing flows (page 11, lines 14-23; fig. 2); wherein Flows represent the control flow between business functions (page 12, lines 25-33).

Kreger does not expressly teach means for storing a process description that includes a medium for storing flows, rules and states, wherein states represent the legal state transitions for a business entities, and roles represent the business rules and policies enforced on the business entities in an externalized form; and means for executing said process.

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However, Cole teaches means for storing (fig. 12, 53) a process description that includes a medium for storing flows, rules and states and flows (par. 0015, lines 1-24), wherein states represent the legal state transitions for a business entities (par. 0112, 0115), and rules represent the business rules and policies enforced on the business entities in an externalized form (par. 0073-0074); and means for executing said process (fig. 12, 52).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have applied to the system of Kreger the technique for controlling business processes using rules, states and flows teaching as outlined by Cole in order to efficiently control execution of business processes and provide the capability to adapt.

26. As per claim 22, it is a process for executing business logic having similar limitations as claims 1 and 21. Therefore, claim 22 is rejected for the same rationale as applied to claims 1 and 21.

27. As per claim 23, it is an automated workflow system having similar limitations as claims 1 and 21. Therefore, claim 23 is rejected for the same rationale as applied to claims 1 and 21.

28. As per claim 24, it is a process for executing business logic having similar limitations as claims 1 and 21. Therefore, claim 24 is rejected for the same rationale as applied to claims 1 and 21.

29. As per claim 25, it is a computer readable medium for storing having similar limitations

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as claims 1 and 21. Therefore, claim 25 is rejected for the same rationale as applied to claims 1 and 21.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. U.S. Patent No. 7,366,751 B2.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLY W HUARACHA whose telephone number is (571) 270-5510. The examiner can normally be reached on M-F 8:30am to 6:00pm, EST.

32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emerson Puente can be reached on (571) 272-3652. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Emerson C Puente/ Supervisory Patent Examiner, Art Unit 2195	/Willy W. Huaracha/ Examiner, Art Unit 2195
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